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(19) (CA) **CANADIAN PATENT** (12)

(54) CAM AND FOLLOWER ARRANGEMENT

(72) Perkins, Charles V.;
Firth, John R.,
U.K.

(73) Granted to Pye (Electronic Products) Limited
U.K.

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No. OF CLAIMS 5

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ABSTRACT:

A cam and follower arrangement in which the cam consists of a track, carried by a rotatable member, and has one or more abrupt directional transitions and the follower is biased to engage one wall or the other of the track appropriate to the direction of rotation of the member, by means including a direct-current electric motor operated in a stalled condition. The arrangement is employed in a monochromator for spectrophotometric apparatus to drive a filter-holder, to position one of a number of optical filters in the incoming beam of light.

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THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A cam and follower arrangement in which the cam is a track carried by a rotatable member and engaged by the follower, the track having one or more abrupt transitions in it, in which a mechanical
5 bias is applied to the follower to cause it to engage with one or other of the walls of the track dependent upon the direction of rotation of the rotatable member, characterised in that the bias is applied to the follower by means including a direct-current electric motor operating in a stalled condition, the polarity of the energising
10 voltage applied to the motor being dependent upon the direction of rotation of the rotatable member.
2. A monochromator including a device bearing a plurality of optical elements and means for driving the device to position one or other of the optical elements in the path of a beam of light
15 traversing the monochromator characterised in that the driving means for the device includes a cam and follower arrangement as claimed in Claim 1.
3. A monochromator in accordance with Claim 2 characterised in that the device is a filter-holder and the optical elements are filters.
- 20 4. Spectrophotometric apparatus including a cam and follower arrangement as claimed in Claim 1.
5. Spectrophotometric apparatus including a monochromator as claimed in Claim 2 or Claim 3.

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P. E. Han
Patent Agent

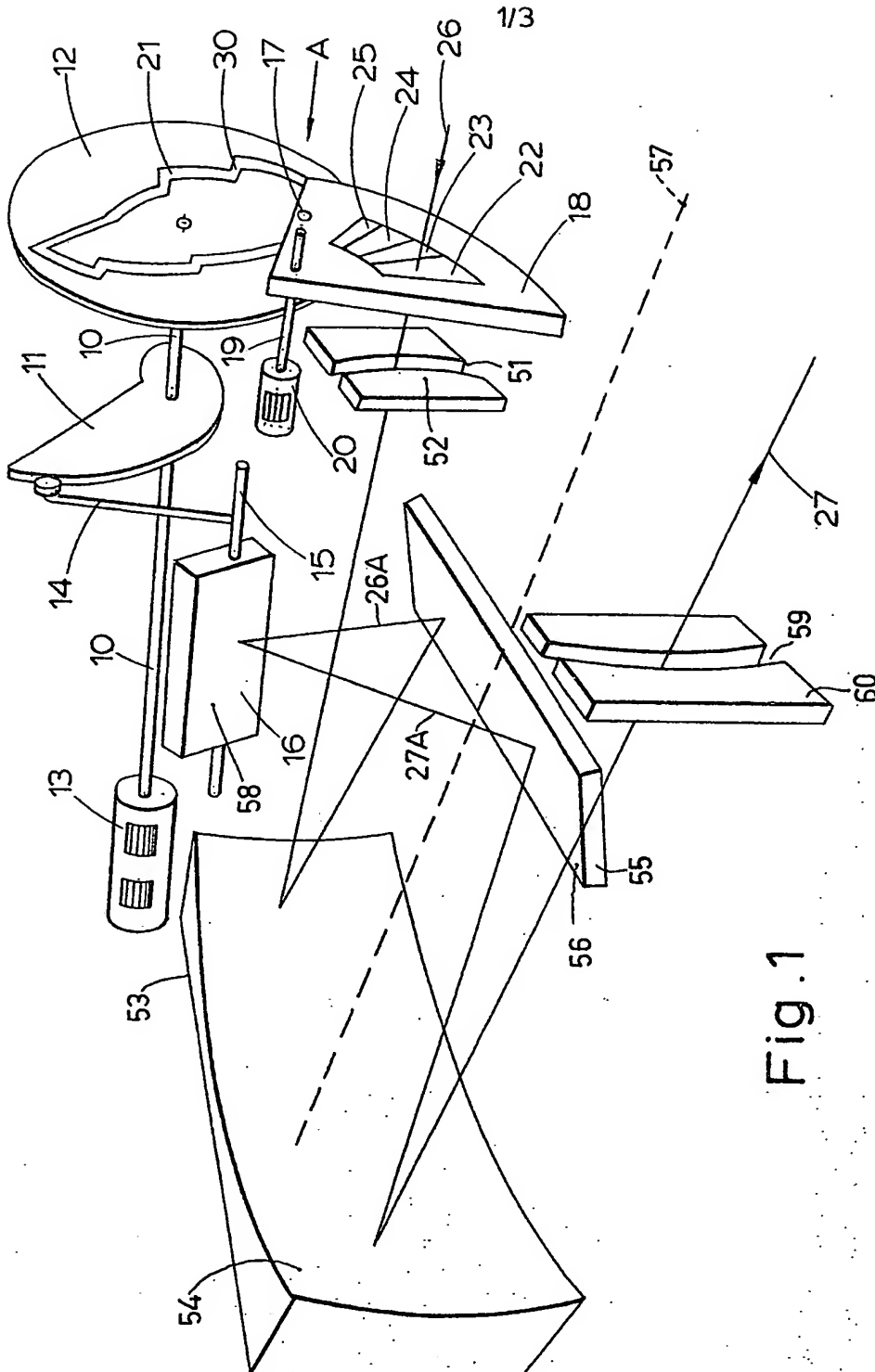


Fig. 1

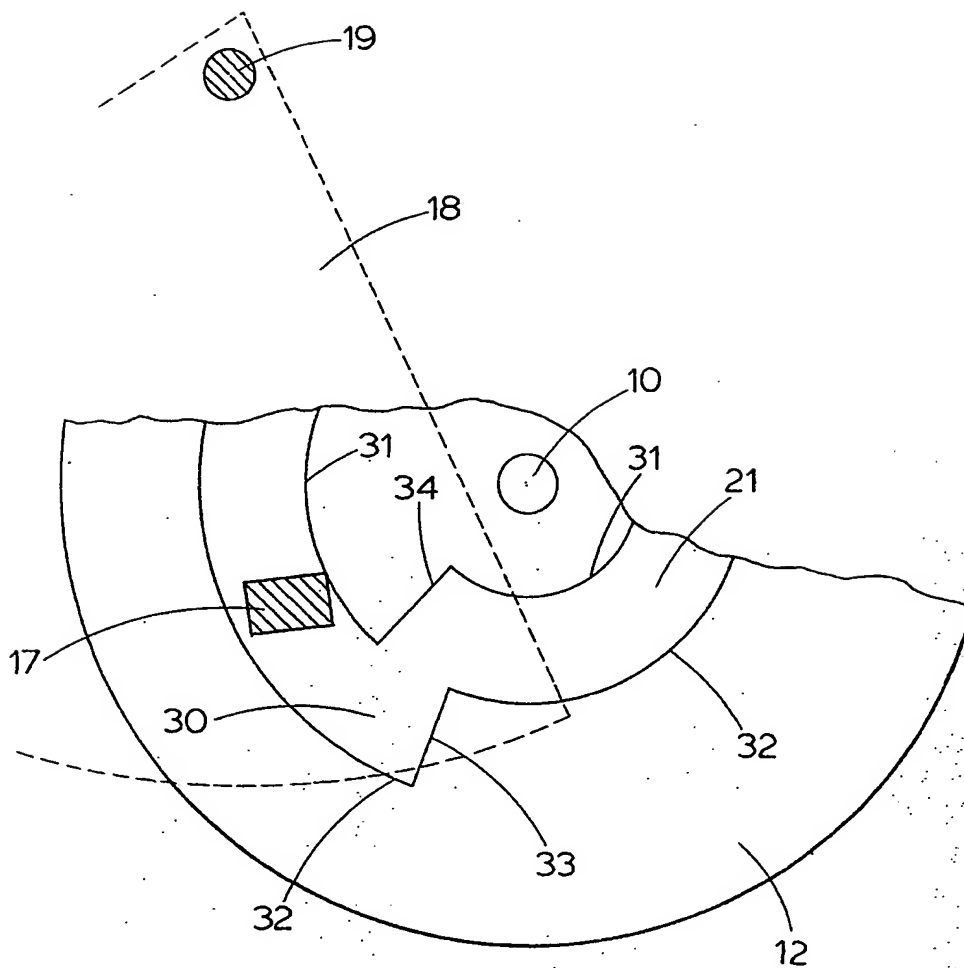


Fig. 2

C. E. Van Steenberg
Patent Agent

Fig. 3.